



# Montgomery County Fire and Rescue Service Post Incident Analysis

## Townhouse Fire



13311 Woodruff Court  
Germantown, MD  
December 8, 2009

Incident #09-0128490  
0744 Hours

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Laytonsville District Volunteer Fire Department

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### **Executive Summary**

At 0744 hours on Tuesday, December 8, 2009, units from the 3<sup>rd</sup> and 5<sup>th</sup> Battalions were dispatched for a townhouse on fire at 13311 Woodruff Court in Germantown. On the initial dispatch, PSCC advised that there was fire in the kitchen, possibly children in the basement, but that everyone had been reported out of the structure. En route to the incident, Engine 729 gave water supply instructions to Engine 722 that he would be performing a split lay at Woodruff Court and Waldorf Drive, and that Engine 722 should complete it to the hydrant in front of 19900 Waldorf Drive, which Engine 722 acknowledged. Rescue Squad 729 en route to the incident reported a good bit of smoke was visible on Father Hurley Boulevard and requested the Rapid Intervention Dispatch and Task Force be started. The first arriving engine (E722) reported heavy fire from side Alpha of a two story, wood frame, end of the unit townhouse. Engine 722 also announced that he would be taking his assigned position of second due. Rescue Squad 729 announced that he would have the command. The second arriving engine (E729) announced that he was advancing a pre-connected hand line to the front door on Side Alpha of the fire building.

Chief 717 Charlie arrived on the scene and assumed the command from Rescue Squad 729, and announced that he was ok on all the reports up until that point. Engine 729, 722, and Tower 729 were assigned to the first floor for fire attack with Engine 729 assigned as the Division Supervisor. Command requested a status on who was assuming the 'two-out' and was told that Rescue Squad 729 would handle those duties for the time being. Rescue Squad 729 then transmitted that he had a confirmation that all occupants were out of the structure, performed a circle check and reported three stories in the rear with heavy smoke from the third floor. Command requested the second alarm assignment be filled and to stage the units at the shopping center at Wisteria Drive and Germantown Road. The second alarm was requested due to the amount of fire visible on side Alpha of the building, and the report from Rescue Squad 729 that there was heavy smoke from the third floor on side Charlie.

There were two civilian (occupants) who were injured when they jumped from the top level in the rear of the townhouse. One was transported to Suburban as a priority two, category C trauma. The other occupant was transported to Shady Grove Adventist Hospital for an evaluation. There were no firefighter injuries.

While overall fire suppression activities worked well, and were well carried out, there are some items that warrant review such as radio communication discipline, announcing of standby crews, and location of resources in relation to the incident and the needs of the on-scene personnel.

### Structure/Site Layout

- This structure is a three story in the rear, two story in the front wood frame townhouse, constructed in the early 1980s.
- There was an exterior entrance on side Charlie to the basement area.
- Walls on the Bravo and Delta were constructed of wood framing with double thickness drywall that extended through the entire roofline providing firewall protection between the fire building and the Delta exposure.



- Inside end unit of first row of townhouses on a dead-end court.
- There was adequate access to side Alpha of the row, with side Charlie being a common area grass lawn that was fenced, preventing fire apparatus access.
- No hydrants on Woodruff Court itself, however, the hydrant that Engine 729 split laid to was less than 100 feet from the intersection of Woodruff Court and Waldorf Drive. There was also a hydrant at the corner of Waldorf Drive and Father Hurley Boulevard, less than 200 feet from the structure.

### **Communications**

- On the initial dispatch, PSCC reported the possibility of children still in the basement, and then amended that report stating that all occupants were out of the residence. This was broadcast during the dispatch on 7 Alpha, and confirmed by Battalion Chief 703 en route on 7 Charlie. It was further confirmed on scene by Rescue Squad 729 after their arrival on the scene and speaking with the occupants of the townhouse.
- Fire ground talk groups were utilized effectively and were adequate for the incident. Units from the first alarm, Rapid Intervention Dispatch, as well as additional EMS units were assigned to 7 Charlie. Second alarm units were assigned to 7 Delta and remained there until called for by command.
- Several units checked 'on scene' with PSCC and command on the fire ground tactical talk group. This will be elaborated upon in the '**Lessons Learned**' section of this report.

### **Incident Scene Operations**

- Engine 729, the first due engine company, communicated to Engine 722 that they were performing a split lay from the intersection of Woodruff Court and Waldorf Drive and that Engine 722 should complete the split by connecting to the hydrant in front of 19900 Waldorf Drive. Engine 722 arrived first, but still took their assigned position of second due, reporting heavy fire from side Alpha of an end unit, two story, wood frame townhouse.
- Rescue Squad, Tower and Engine 729 were the next units to arrive, with positions taken on Woodruff Court which allowed the Rescue Squad to operate and be out of the way, Tower 729 to have good position for possible use of the aerial, and Engine 729 to deploy hand lines effectively.
- The Incident Action Plan, while not formally communicated via radio, was to contain the fire to the building of origin, control the fire, and stabilize the incident as quickly as possible.
- Engine 729 announced that they were stretching a pre-connected hand line to the front door on side Alpha. Engine 722 stretched a two inch line from Engine 729, conferred with Engine 729's officer, and a decision was made to take that line to the floor above due to the limited space provided by the floor plan of the structure.
- Tower 729 (Right) forced entry to the door on side Alpha of the structure. After the door was forced open, fire was now venting from the entry point into the structure.

- Tower 729's driver threw ground and extension ladders to windows on the second floor of the fire building.
- Engine 729 and Engine 722's crews advanced their pre-connected hand lines through the door on side Alpha. Engine 729's crew knocked the fire venting from the entry point as they entered the structure, and began to knock the fire in the foyer, kitchen, and dining room area.
- Engine 722 advanced their line to the second floor knocking fire in a room in the Alpha/Delta quadrants of the house. The crew then performed a left-hand search pattern of the second floor of the structure, encountering a bathroom and two bedrooms in the Bravo and Charlie quadrants. Engine 722's crew vented windows in all rooms, then advanced their hand line to the Charlie/Delta quadrant rooms and knocked fire in this area.
- Tower 729's crew made entry to the structure and assisted with ventilation needs on the first and second floors.
- Rescue Squad 729's driver reported the electric controlled and a negative on the primary search of the basement of the structure.
- Rescue Squad 729's officer reported a negative on the primary search of the first floor of the structure.
- Engine 735, third due, dropped a line from the intersection of Wisteria Drive and Waldorf Drive and positioned on Waldorf Drive just prior to Woodruff Court. Engine 735's crew advanced an attack line to side Alpha of exposure Delta, and was ordered to extinguish fire that was auto-extending on the exterior of exposure Delta.
- Battalion Chief 705 arrived and was assigned as the Incident Scene Safety Officer.
- Battalion Chief 703 arrived, checked on the scene via radio, and was assigned to be the Division One supervisor.
- Rescue Squad 729 reported an all clear on the primary search of second floor of the structure. Command then confirmed with Rescue Squad 729's officer that the entire structure was clear for a primary search, and Rescue Squad 729's officer confirmed that information.
- Engine 708, fourth due engine, set up the Rapid Intervention Company on side Alpha. Engine 708's officer was assigned as the Rapid Intervention Group Supervisor upon the arrival of the Rapid Intervention Dispatch units (Tower 708, Rescue Squad 703, Medic 735).

- Safety advised that he needed ladders to the second and third floor on side Charlie, and that he had smoke coming from the eaves of the Delta exposure.
- Tower 735, second due aerial, arrived and took a position past Woodruff Court on Waldorf Drive due to the limited access to side Charlie. The driver threw ground and extension ladders to the second and third floors on side Charlie of the fire building.
- EMS703 arrived at the command post and reported there were occupants from the structure that had been injured from an apparent jump from the third floor in the rear.
- Engine and Tower 735's crews were re-directed to the interior of exposure Delta due to auto-extension of fire on the exterior of the second floor and the report of smoke coming from the eaves of the Delta exposure. Engine and Tower 735's crews were instructed to check the attic and second floor of exposure Delta for possible fire extension. They entered exposure Delta and checked the attic area as well as the second floor for extension, finding only smoke and heat.
- Division two advised command of a soft floor in quadrant Delta of the structure. Crews were advised to remain out of the Delta quadrant. Engine 729 reported that there was alligating of the plywood of the ceiling, however, the floor joists were still structurally sound.
- After the fire had been knocked in the structure, and ceilings were pulled in the area of origin as well as the second floor, the fire was declared under control. Units continued to check exposure Delta finding no further extension other than on the exterior.
- The majority of the fire on the first and second floors was extinguished within 10 minutes of the arrival of Fire/Rescue. The fire conditions had consumed much of the kitchen area, with extension to the second floor of the structure via void spaces between floors. Fire conditions had vented from the first floor on side Alpha, causing extension to the exterior of the Delta exposure. Heavy fire conditions vented from the third floor of side Charlie, but were extinguish in a quick manner and there was no extension to the attic or roof areas. There was little or no damage to the basement area other than smoke and water.
- Engine 713 was assigned to do a secondary recon of the basement to ensure that there was no fire extension in that area.
- Chief 729 Delta was assigned to take over as the Division One Supervisor. As he entered the structure, Engine 729 was required to remind him of the IDLH in place. This will be elaborated on in the 'Lessons Learned' section of this report.

### **Accountability**

- Personnel Accountability tags were collected during the incident and placed in the command post. Until such time as the PAS tags were available, command utilized a standard command chart to track units and their assignment to divisions.
- A Personnel Accountability Report was conducted after the fire had been controlled by polling the Divisions for units assigned to them. All Personnel were accounted for on the fire ground. No further PAR was conducted.

### **Staging**

- Second Alarm units were assigned to the tactical talk group 7 Delta, and staged at the shopping center parking lot at Wisteria Drive and Germantown Road. Engine 731 assumed the role of Staging Manager.

### **Support**

- The PIO was on scene to handle the media.
- Canteen 717 responded to the incident to supply food and drink to the crews operating.
- The Red Cross was requested for the occupants of the structure, as well as the occupants of the Delta exposure.

### **Life Safety Systems**

- It was not reported whether smoke detectors were present and/or activated.
- There were no sprinkler systems or other suppression systems present.

### **Fire Cause and Origin Investigation**

- Fire Investigators arrived on the scene and began their investigation. It was determined that the cause of the fire was poorly attended cooking involving a juvenile. The damage was estimated at \$50,000 to the contents and \$200,000 to the structure.



## Lessons Learned

### Initial Fire Ground Operations:

When an incident occurs and there is no life safety issue, first arriving units must establish and announce a 'Two-Out' crew. Rescue Squad 729 established command, however, did not announce a 'Two-Out' crew initially. With no obvious or reported life safety issues, initial crews must identify and announce:

- That a crew has been designated as the 'Two-Out'.
- What crew has been designated as the 'Two-Out'.

### Water Supply:

Water supply instructions from the first, second, and third due companies were clear and concise. Hydrants were located within 200 feet of the structure. A split lay was performed by Engine 729 at Woodruff Court and Waldorf Drive. Engine 735 laid a line from Waldorf Drive and Wisteria Drive. While this is likely the most convenient option, it may not be the best one as it is likely that these two hydrants feed off of the same supply.

### Radio Communications:

In the initial phases of a working incident, radio time is at a premium. Water supply instructions, the status of any occupants of the structure, as well as requests for additional resources are being communicated. Units who do not possess a Mobile Data Computer, or in cases where the Mobile Data Computer is not functioning must communicate their statuses on 7 Bravo rather than the fire ground tactical talk group or 7 Alpha. Battalion Chief 703 checked on scene via radio and inquired as to moving the command post to his vehicle. Per Fire Chief's General Order #08-19:

"Units responding on incidents that have been assigned to a Tactical Talk Group must **not** verbally announce the unit's status (i.e., responding, on-scene, etc.) on the Tactical Talk Group. These verbal announcements must be made on 7 Bravo (or 71 Bravo; 72 Bravo; etc.). After a unit's status has been acknowledged on 7 Bravo (or 71 Bravo; 72 Bravo; etc.), that unit must switch to the Talk Group(s) assigned to the incident."<sup>1</sup>

Command officers reporting to the scene have been directed to follow a policy of reporting to the command post in their full Personal Protective Envelope and request an assignment face to face, rather than transmitting the request via radio. Units on this incident communicated their status on the fire

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<sup>1</sup> Montgomery County Fire and Rescue Service, Fire Chief's General Order #08-19

ground talk group. Chief 729 Delta and Chief 708 made verbal requests on the radio for assignments rather than reporting to the command post for an assignment.

Once Command has been established and operations have begun, unit to unit communications are to be directed to Command or Division and Group Supervisors. Tower 735 called Rescue Squad 729 directly after Command had been established to inquire about access to side Charlie for the tower.

#### Accountability:

In their Post Incident Analysis Fact Sheet, Engine 722 reported that they took their line to the second floor of the structure almost immediately after entering the structure. This was not immediately communicated to Command. Had one of the members of Engine 722's crew become incapacitated, declared a MAYDAY, or otherwise needed assistance, Command would have not had any idea where to send resources to assist.

#### Command and Division/Group Supervisors:

As previously stated, the Incident Action Plan was never formally announced via the radio. The IAP was to contain the fire to the building of origin, confine the fire, and stabilize the incident as quickly and efficiently as possible. While this plan was never formally announced, there was no doubt as to command's intention with the incident and what tasks units were assigned to complete. This does not excuse the lack of announcement on command's part, however.

When commanding an event, the Incident Commander must be easily identifiable to units arriving on the scene. The command post should be indicated by a green strobe light. This was not done on this incident.

During the incident, command used first names on the tactical talk group rather than unit designations. This not in holding with best practices for radio communications, as there could possibly be many personnel on the fire ground who share the same first name. Unit designations must be used at all times when in an operational mode of any kind.

When it is necessary to deliver a common message to several units at the same time, command officers must remember to call each unit individually. This was not done in a few instances on this incident. Calling multiple units at the same time will only lead to confusion on the talk group, and multiple units trying to talk to command at the same time.

Units taking over assignments on the fire ground must be aware of the status of the atmosphere in the structure and any affected exposure buildings at all times. Until a building is declared to have no IDLH present, full PPE and SCBA **must** be utilized. Chief 729 Delta attempted to enter the structure while there was still an IDLH present without his SCBA in place.

### **Comments**

In listening to the recording of the initial dispatch, there seems to be a very long (ten second) lag time between the end of the initial announcement of 'Units Respond on 7 Charlie' and the time the address of the event is given. With an initial report of occupants still being in the building, or even without a report such as this from the calling party, this time should be shorter and simply is unacceptable.

Overall, the incident went very smoothly and the fire was contained to the building of origin. Units were requested to deviate from the Standard Operating Procedure and did so without question. This option was exercised by command due to the fire travelling the front exterior of the row of townhouses. Personnel must be directed to deviate from SOP when it will positively affect the outcome of the event, and when there is a justifiable reason. While the SOPs established by MCFRS will be able to stabilize the majority of events that we respond to, command officers must be able to recognize the times when they will not, and be able to act upon that in a quick and efficient manner.

All incidents of a Second Alarm or greater automatically have the Command Post dispatched. While this is a useful resource on long duration incidents, or incidents that are spread out over multiple buildings or units in a building, it is not necessary for the typical single family home or townhouse fire.

#### Units on Incident

Enignes	Special Services	EMS & Support	Command	FM
E729	AT729	A729	BC703	FM10
E722	AT735	M729	BC705	FM27
E735	RS729	M735	DC700	FM55
E708	AT708	A708	C717C	FM59
E753	RS703	A709	C708	FM67
E731	T731	CP727	C729D	
RE709	AT703	AR733	U3	
E713		CT717	U131	
E703		SA700	U121	
		EMS703		



First Alarm Unit Positioning